



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,156	12/16/2005	Bjorn Norhammar	9563-10	9132
20792	7590	12/03/2009	EXAMINER	
MYERS BIGEL, SIBLEY & SAJOVEC			LIU, BEN H	
PO BOX 37428			ART UNIT	PAPER NUMBER
RALEIGH, NC 27627			2464	
MAIL DATE		DELIVERY MODE		
12/03/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,156	<b>Applicant(s)</b> NORHAMMAR ET AL.
	<b>Examiner</b> BEN H. LIU	<b>Art Unit</b> 2464

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 August 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4-7 and 9-29 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,4-7 and 9-29 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/GS-68)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This is in response to an amendment/response filed on August 20<sup>th</sup>, 2009.
2. Claims 1 and 22 have been amended.
3. No claims have been cancelled. Claims 3 and 8 were previously cancelled.
4. No claims have been added.
5. Claims 1, 2, 4-7, and 9-29 are currently pending.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 2, 4, 6, 7, and 9-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (U.S. Patent 6,987,767) in view of MacInnis et al. (U.S. Patent 6,853,385).

**For claim 1**, Saito discloses a method of forming an output media stream to be transmitted during a communication session from a portable communication device wherein said output media stream comprises signals of a first media type, the method comprising:

generating in real time a first media stream in the portable communication device (*see column 9 lines 14-24 and figure 4, which recite microphone 31 and camera 33 that generate a real-time media stream as input to multiplexer 22*),

combining in real time the first media stream with a second media stream to form the output media stream (*see column 9 lines 62-67, column 10 lines 1-2, and figure 1, which recite a multiplexer 22 that combines a media stream generated by microphone 31 and camera 33 with media streams of various encoding units*),

wherein combining comprises combining signals of the first media type from the first media stream with signals of the first media type from the second media stream (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of the encoding units and*

*further combining the audio streams of the encoding units using the TS multiplexing section 310),*

transmitting said output media stream (see column 9 lines 25-31, which recite transmitting the multiplexed stream using transmission circuit TX 15).

Saito discloses all the subject matter of the claimed invention with the exception wherein combining media streams specifically comprises superposing signals of the first media type from the first media stream on signals of the first media type from the second media stream to produce the output media stream, wherein the output media stream comprises portions of the first and second media streams which are configured to be presented in a substantially simultaneous time. However, MacInnis et al. from the same or similar fields of endeavor disclose a system for combining audio and video transport streams into blended graphics or two simultaneous in-band streams in a picture-in-picture format that are presented in a substantially simultaneous time (see column 1 lines 60-67 and column 2 lines 1-16). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that superposes media streams as taught by MacInnis et al. with the communication device configured to form an output media stream as taught by Saito. The MPEG transport streams as taught by Saito can be superimposed into an output stream using the system as taught by MacInnis et al. The motivation for using the system that superposes media streams as suggested by MacInnis et al. with the communication device configured to form an output media stream as taught by Saito is to improve the performance of the system by transmitting information from multiple media streams as a single superposed media stream.

**For claim 2**, Saito discloses disclose a method for forming an output media stream wherein said output media stream comprises signals of a second media type (*see column 9 lines 25-31, which recite a multiplexed transport stream containing both audio and video data*).

**For claim 4**, Saito discloses a method of forming an output media stream that further comprises establishing a connection with another device (*see column 8 lines 23-50 and column 9 lines 14-31, which recite a transmission circuit 15 used to establish a connection with another device*).

**For claim 6**, Saito discloses a method for forming an output media stream in which at least one of the steps is dependent on input data from a user of said portable communication device (*see figure 4, which recite an input section 35 that provides input for the main control portion 21 that is responsible for forming the multiplexed media streams*).

**For claim 7**, Saito discloses disclose a method for forming an output media stream wherein combining comprises combining signals of the first media type from the first media stream with signals of a second media type from the second media stream (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of multiple encoding units and further combining the audio streams of the multiple encoding units using TS multiplexing section 310*).

**For claim 9**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises combining signals of a second media type from the first media stream with the signals from the second media stream (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of multiple encoding units and further combining the audio streams of the multiple encoding units using TS multiplexing section 310*).

**For claim 10**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises combining signals from the first media stream with signals of the second media type from the second media stream (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of multiple encoding units and further combining the audio streams of the multiple encoding units using TS multiplexing section 310*).

**For claim 11**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises combining signals of the second media type from the first media stream with signals from the second media stream (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of multiple encoding units and further combining the audio streams of the multiple encoding units using TS multiplexing section 310*).

**For claim 12**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises delaying, prior to combining, signals of one media type of the second media stream in relation to the other media type of signals of the same stream to provide synchronized signals from the second media stream within the output media stream (*see column 7 lines 23-31, which recite delaying signals of one media type by shifting the value of the Presentation Time Stamp PTS value to a later time to provide synchronized signals*).

**For claim 13**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises independently combining signals of the first media type and signals of the second media type (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of multiple encoding units and further combining the audio streams of the multiple encoding units using TS multiplexing section 310*).

**For claim 14**, Saito discloses disclose a method for forming an output media stream wherein combining further comprises delaying signals of one media type within the output media stream, in relation to the other media type of signals of the same stream to provide synchronized signals from the first media stream within the output media stream (*see column 7 lines 23-31, which recite delaying signals of one media type that is part of the multiplexed transport stream by shifting the value of the Presentation Time Stamp PTS value to a later time to provide synchronized signals*).

**For claim 15**, Saito discloses disclose a method for forming an output media stream wherein the signals of the first media type are audio signals so that the signals of the first media type from the first media stream comprise first audio signals and the signals of the first media type from the second media stream comprise second audio signals (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of the encoding units and further combining the audio streams of the encoding units using the TS multiplexing section 310*), wherein combining further comprises superposing the first and second audio signals of the first and second media streams (*see column 4 lines 57-67 and figure 6, which recite superposing the audio streams into a single transport stream by multiplexing individual partitioned PES portions of the parse-PES generation sections 612 to 6n2 into a single transport stream*).

**For claim 16**, Saito discloses disclose a method for forming an output media stream wherein superposing comprises weighting properties of the audio signals from the first media stream and the second media stream (*see column 4 lines 57-67 and figure 6, which recite superposed audio streams with weighting properties based upon the amount of partitioned PES portions that each audio stream provide for multiplexing to the TS multiplexing section 310*,

*since the more partitioned PES portions are provided for multiplexing, the more data from that stream becomes part of the multiplexed transport stream).*

**For claim 17**, Saito discloses disclose a method for forming an output media stream wherein the signals of the first media type are image signals so that the signals of the first media type from the first media stream comprise first image signals and the signals of the first media type from the second media stream comprise second image signals (*see column 4 lines 20-27 and 50-56, which recite combining the video streams of the encoding units and further combining the audio streams of the encoding units using the TS multiplexing section 310*), wherein combining further comprises blending the first and second image signals of the first and second media streams (*see column 4 lines 57-67 and figure 6, which recite superposing the video streams into a single transport stream by multiplexing individual partitioned PES portions of the parse-PES generation sections 611 to 6n1 into a single transport stream*).

**For claim 18**, Saito discloses disclose a method for forming an output media stream wherein blending comprises weighting properties of the image signals from the first media stream and the second media stream (*see column 4 lines 57-67 and figure 6, which recite superposed videotreams with weighting properties based upon the amount of partitioned PES portions that each audio stream provide for multiplexing to the TS multiplexing section 310, since the more partitioned PES portions are provided for multiplexing, the more data from that stream becomes part of the multiplexed transport stream*).

**For claim 19**, Saito discloses disclose a method for forming an output media stream wherein weighting properties includes varying the proportion of signals from the first media stream in relation to the proportion of signals from the second media stream (*see column 4 lines*

*57-67 and figure 6, which recite superposed audio streams with varying proportion of signals since as more partitioned PES portions are provided for multiplexing by the audio stream, less of the resulting multiplexed transport stream comprises audio from the other audio streams).*

**For claim 20,** Saito discloses disclose a method for forming an output media stream wherein weighting properties is dependent on input data of a user of said portable communication device (*see figure 4, which recite microphone 31, camera 32, and key input section 35 of input section 3 which takes input data of a user, wherein the weighting properties of the input data depends on the amount of input data provided by the user*).

**For claim 21,** Saito discloses disclose a method for forming an output media stream wherein varying said proportions comprises varying of each proportion within the range between 0 and 100% (*see column 4 lines 57-67 and figure 6, which recite superposed audio streams with weighting properties based upon the amount of partitioned PES portions that each audio stream provide for multiplexing to the TS multiplexing section 310, wherein an audio stream may provide all of the audio data to be multiplex or no data to multiplex*).

**For claim 22,** Saito discloses a portable communication device configured to form an output media stream to be transmitted during a communication session from said portable communication device, wherein said output media stream comprises signals of a first media type, said portable communication device comprising:

at least one generating unit configured to generate a first media stream (*see column 9 lines 14-24 and figure 4, which recite microphone 31and camera 33 that generate a real-time media stream as input to multiplexer 22*),

a first combining unit, connected to said generating unit, wherein the first combining unit is configured to combine in real time the first media stream with a second media stream (*see column 9 lines 62-67, column 10 lines 1-2, and figure 1, which recite a multiplexer 22 that combines a media stream generated by microphone 31 and camera 33 with media streams of various encoding units*),

wherein the first combining unit is configured to combine signals of the first media type from the first media stream with signals of the first media type from the second media stream to form the output media stream (*see column 4 lines 20-27 and 50-56, which recite TS multiplexing section 310 of multiplexer 22 that combines the video streams of the encoding units and further combines the audio streams of the encoding units*),

a control unit configured to control the generating unit and the combining unit, in dependence of user input (*see figure 4, which recite a main control portion 21 that receives user input from input section 35*), and

a transmitter configured to transmit said output media stream (*see column 9 lines 25-31, which recite transmitting the multiplexed stream using transmission circuit TX 15*).

Saito discloses all the subject matter of the claimed invention with the exception wherein combining media streams specifically comprises superposing signals of the first media type from the first media stream on signals of the first media type from the second media stream to produce the output media stream, wherein the output media stream comprises portions of the first and second media streams which are configured to be presented in a substantially simultaneous time. However, MacInnis et al. from the same or similar fields of endeavor disclose a system for combining audio and video transport streams into blended graphics or two simultaneous in-band

streams in a picture-in-picture format that are presented in a substantially simultaneous time (*see column 1 lines 60-67 and column 2 lines 1-16*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that superposes media streams as taught by MacInnis et al. with the communication device configured to form an output media stream as taught by Saito. The MPEG transport streams as taught by Saito can be superimposed into an output stream using the system as taught by MacInnis et al. The motivation for using the system that superposes media streams as suggested by MacInnis et al. with the communication device configured to form an output media stream as taught by Saito is to improve the performance of the system by transmitting information from multiple media streams as a single superposed media stream.

**For claim 23**, Saito discloses a portable communication device configured to form an output media stream, wherein the first combining unit is configured to combine signals of the first media type of both the first and the second media streams, wherein the output media stream comprises signals of the first media type and a second media type, wherein the portable device further comprises:

a second combining unit configured to combine signals of the second media type of the first media stream and signals of the second media type of the second media stream by using the second combining unit (*see column 4 lines 20-27 and 50-56, which recite TS multiplexing section 310 of multiplexer 22 that combines the video streams of the encoding units and further combines the audio streams of the encoding units*).

**For claim 24**, Saito discloses a portable communication device configured to form an output media stream, further comprising a memory unit configured to provide storage for the

second media stream (*see column 9 lines 1-4, which recite memory 26 that stores video and audio data*).

**For claim 25**, Saito discloses a portable communication device configured to form an output media stream, further comprising a user input interface configured to provide user input (*see figure 4, which recite an input section 35 that provides input for the main control portion 21 that is responsible for forming the multiplexed media streams*).

**For claim 26**, Saito discloses a portable communication device configured to form an output media stream wherein said device further comprises a multiplexing unit configured to provide synchronization of signals of one media type from the first media stream in relation to signals of the other media type from the same first media stream, within the output media stream (*see column 7 lines 23-31, which recite providing synchronization of the video and audio data*).

**For claim 27**, Saito discloses a portable communication device configured to form an output media stream, further comprising a delaying unit configured to provide synchronized signals within the output media stream (*see column 7 lines 20-31, which recite delaying signals of one media type by shifting the value of the Presentation Time Stamp PTS value to a later time to provide synchronized signals video and audio signals*).

**For claim 28**, Saito discloses a portable communication device configured to form an output media stream wherein the delaying unit provides synchronization of signals from the second media stream, prior to combining with the first stream (*see column 7 lines 20-31, which recite delaying signals of one media type by shifting the value of the Presentation Time Stamp PTS value to a later time to provide synchronized signals video and audio signals*).

**For claim 29**, Saito discloses a portable communication device configured to form an output media stream wherein the delaying unit provides synchronization of signals of one media type in relation to signals of the other media type from the same second media stream (*see column 7 lines 20-31, which recite delaying signals of one media type by shifting the value of the Presentation Time Stamp PTS value to a later time to provide synchronized signals video and audio signals*).

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (U.S. Patent 6,987,767) in view of MacInnis et al. (U.S. Patent 6,853,385) and further in view of Knuutila et al. (U.S. Patent 6,810,035).

**For claim 5**, Saito and MacInnis et al. disclose all the subject matter of the claimed invention with the exception wherein the established connection is a circuit-switched connection. Knuutila et al. from the same or similar fields of endeavor disclose a wireless terminal that communicates real time media using a circuit switched connection (*see column 2 lines 22-32*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the wireless terminal that establishes circuit-switched connections as taught by Knuutila et al. with the portable communication device configured to form an output media stream as taught by Saito. The wireless terminal that establishes circuit-switched connections can be implemented by using the radio transceiver 204 as taught by Knuutila et al. as the radio transceiver of the portable communication device as taught by Saito. The motivation as suggested by Knuutila et al. for using the wireless terminal that establishes circuit-switched

connections with the portable communication device configured to form an output media stream is to provide communication of real time service (*see column 2 lines 42-44*).

***Response to Arguments***

11. Applicant's arguments with respect to claims 1, 2, 4-7, and 9-29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (*please see form PTO-892*).

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit  
2464

BL